NEW MALLOPHAGA FROM THE BLACK CURASSOW (GALLIFORMES: CRACIDAE) IN VENEZUELA[1]

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ABSTRACT

The new species *Amyrsidea* (*Cracimenopon*) *steineri* and *Oxylipeurus spangleri* are described and illustrated for material taken from the Black Curassow, *Crax alector*, in Venezuela.

Key Words: Mallophaga, *Amyrsidea*, *Oxylipeurus*, Galliformes, *Crax*.

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INTRODUCTION

Chewing lice (Mallophaga) of the menoponid genus *Amyrsidea* Ewing and the philopterid genus *Oxylipeurus* Mjöberg are widely distributed among the gallinaceous birds (Galliformes). Scharf and Emerson (1984) revised the *Amyrsidea* of the subgenus *Cracimenopon* Carriker, treating the 14 louse species that represent the only *Amyrsidea* known from the avian family Cracidae. Clay (1938) revised the *Oxylipeurus* and Carriker (1944) described some additional species from hosts in the Cracidae.

We have received 2 series of lice recently taken from *Crax alector* Linnaeus, the Black Curassow, one representing a new species of *Amyrsidea* and the other a new species of *Oxylipeurus*. It is our purpose here to describe and illustrate these new species. For brevity, in the following descriptions we will not repeat the generic or subgeneric characters since those have been given by Scharf and Price (1977) and Scharf and Emerson (1984) for *Amyrsidea* and by Clay (1938) for *Oxylipeurus*. All measurements are given in millimeters.

Amyrsidea (*Cracimenopon*) *steineri*, new species (Figs. 1 - 3)

Female

As in Fig. 3. Middorsal head setae minute, in straight line across head. Margin of pronotum with short corner seta on each side and 14 long setae. Metanotum with 12 long marginal setae. Mesosternal and metasternal plates each with 10 - 12 setae. Abdominal tergite I greatly enlarged, extending across nearly two-fifths of abdomen; tergites II - IV markedly narrowed medially; remaining tergites normal. No tergites divided. Marginal tergal setae: I - II, 14 - 17; III, 23 - 25; IV 34- 35; V, 39 - 45; VI, 36 - 41; VII, 28 - 31; VIII, 15 - 18. No anterior tergal setae. Last

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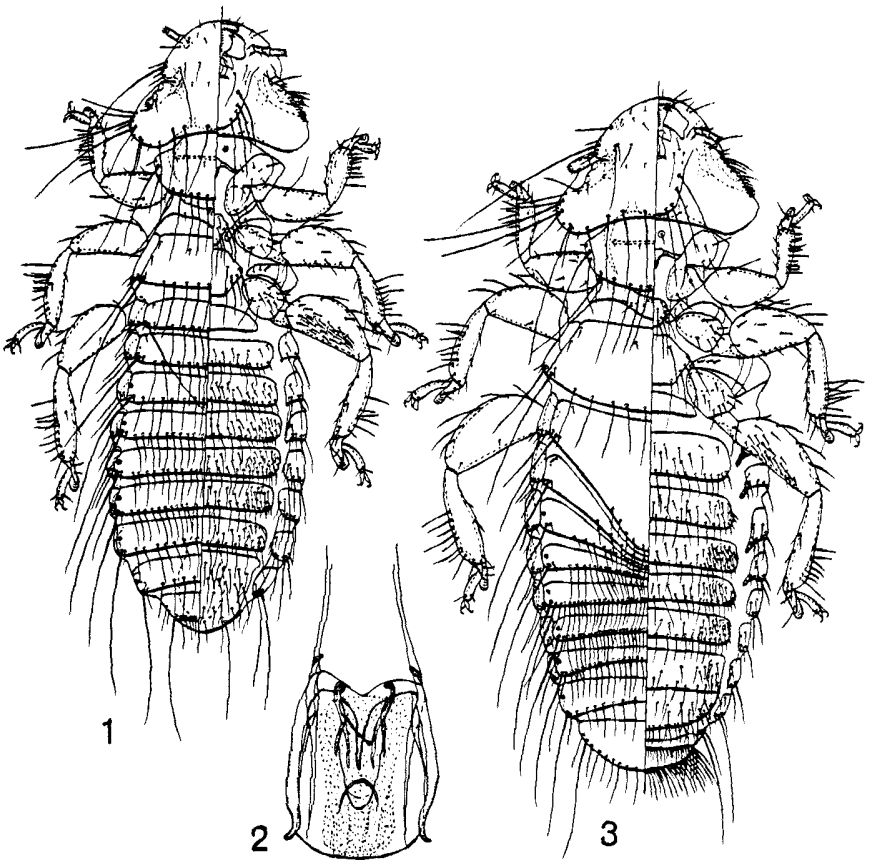


Figs. 1 - 3. *Amyrsidea* (*Cracimenopon*) *steineri* n. sp. 1. Male dorsal-ventral view. 2. Male genitalia. 3. Female dorsal-ventral view.

segment with 2 very long marginal setae and 2 setae anterior to these on each side, and total of 14 - 16 inner posterior setae. Sternal setae: II, 37 - 45; III, 55 -62; IV - V, 76 - 87; VI, 62 - 73; VII, 31 - 42. Subgenital plate with 24 - 26 evenly-distributed marginal setae and 19 - 20 anterior setae. Anal fringe with 59 - 68 setae both dorsally and ventrally. Dimensions: preocular width, 0.42 - 0.43; temple width, 0.62 - 0.64; head length, 0.38 - 0.39; prothorax width, 0.46 - 0.47; metathorax width, 0.72 - 0.73; total length, 2.09 - 2.17.

Male

As in Fig. 1. Essentially as for female, except as follows. All abdominal tergites of similar size. Marginal tergal setae: 1, 16; II - III, 15 - 18; IV, 20 - 24; V, 24 - 27; VI, 21 - 27; VII, 19 - 22; VIII, 12 - 13. Shape and chaetotaxy of last segment as shown. Sternal setae: II, 32 - 38; III, 50 - 55; IV - V, 67 - 78; VI, 57 - 63; VII, 41 -

44; VIII (fused with IX), 16 - 25; remainder of subgenital plate, 13 - 16. Genitalia as in Fig. 2. Dimensions: preocular width, 0.38 - 0.39; temple width, 0.55 - 0.58; head length, 0.36 - 0.37; prothorax width, 0.40 - 0.43; metathorax width, 0.50 -0.54; total length, 1.83 - 1.94; genitalia width 0.15 - 0.17, length 0.30 - 0.32.

Material

Holotype female, ex *Crax alector* Linnaeus, Cerro de la Neblina, T. F. Amazonia, Venezuela, 23.II.1985, W. E. Steiner; in collection of the U. S. National Museum of Natural History. Paratypes, 3 females, 5 males, same data as holotype; distributed among the U. S. National Museum of Natural History, Oklahoma State University, and University of Minnesota.

Remarks

By the female having a markedly enlarged first abdominal tergite and no tergites divided, *A. steineri* differs from all other known members of the subgenus *Cracimenopon;* it will not successfully identify with any species in the key to females provided by Scharf and Emerson (1984) due to the absence of divided tergites. Males of *Cracimenopon* are much more difficult to identify, with all couplets in the key for males in Scharf and Emerson (1984) utilizing genitalic features that are so subject to interpretative variation. The male genitalia of *A. steineri* appear most similar to those of *A. rogersi* Scharf and Emerson from *Crax f. fasciolata* Spix; however, the latter has both sexes much smaller and the female with a smaller first abdominal tergite and tripartite tergites on V - VII, as well as other differences.

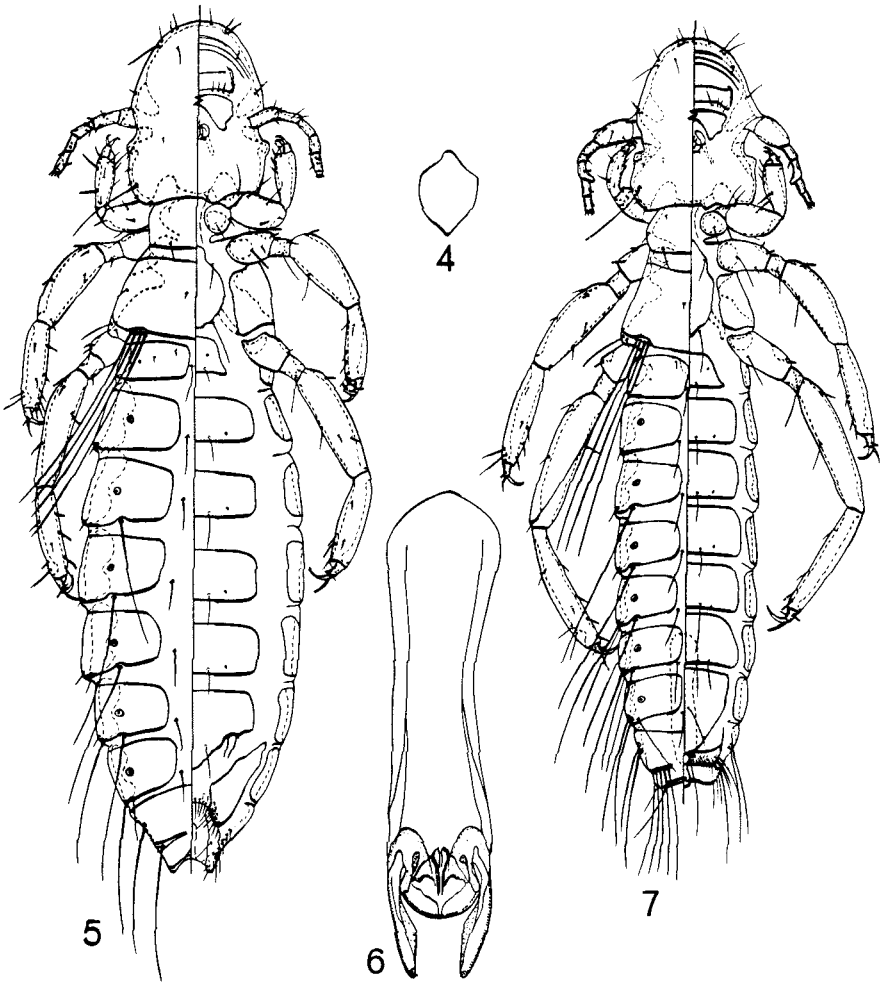
In the material examined section for *A. pauxis* Carriker, Scharf and Emerson (1984) list one male and one female off "*Crax nigra* L., Venezuela [San Felipe, E. Yaracuy]" and 5 males and 2 females off "*C. alector* L. (= *Crax nigra*), Surinam." Specimens of *A. steineri* are easily separated from *A. pauxis* by the former having both sexes with only 12 long marginal metanotal setae and the female with a differently-shaped first abdominal tergite, without any divided abdominal tergites, and tergites I - II with a distinct gap in the row between the corner setae and the remaining ones. The separation of these species is further supported by other differences. The significance of 2 *Amyrsidea* species on the same host taxon may be a reflection of the wide geographic separation, with over 600 miles between the locality of *A. steineri* and both of those of the *Crax* bearing *A. pauxis*.

This species is named for Mr. Warren E. Steiner, U. S. National Museum of Natural History, the collector.

Oxylipeurus spangleri, new species
(Figs. 5 - 7)

Female

As in Fig. 5. Head with anterior margin evenly rounded. Antenna filiform. Pteronotum with pair of short anterior setae and group of 4 very long setae on each side. Abdominal tergites II - VIII each divided medially; II without marginal setae; III with only short lateroposterior seta; IV - V with short lateroposterior seta and very long seta posterior to spiracle; VI with 2 short lateroposterior setae and very long seta posterior to spiracle; VII with 2 very long setae and short lateroposterior seta; VIII with very long and medium lateroposterior setae; II - VIII



Figs. 4 - 7. *Oxylipeurus rhynchoti* (Carriker). 4. Female thoracic sternal plate, same scale as Fig. 5. *Oxylipeurus spangleri* n. sp. 5. Female dorsal-ventral view. 6. Male genitalia. 7. Male dorsal-ventral view.

with pair of medium setae between tergites. Terminal segments dorsally on each side with 2 very long setae and plates as shown. Sternites II - VI each with pair of marginal medium setae and pair of sensilla; ventral terminalia with sclerites and chaetotaxy as shown. Dimensions: preantennal width, 0.48 - 0.50; temple width, 0.49 - 0.51; head length, 0.61 - 0.65; prothorax width, 0.35 - 0.36; pterothorax width, 0.57 - 0.60; total length, 2.74 - 3.11.

Male

As in Fig. 7. Much as for female, except as follows. Antenna with enlarged first segment and distally produced third segment. Tergites VI - VII with lateroposterior setae both very long; VIII with additional very long lateroposterior seta. Terminal segments dorsally on each side with pair of lateroanterior very long setae and row of 5 - 6 very long setae posterior to these. Ventral terminalia with sclerites and chaetotaxy as shown; medioposterior lobe-like projection bearing 4 minute setae. Genitalia as in Fig. 6. Dimensions: preantennal width, 0.44 - 0.46; temple width, 0.46 - 0.47; head length, 0.61 - 0.63; prothorax width, 0.33 - 0.34; pterothorax width, 0.50 - 0.52; total length, 2.76 - 2.84; genitalia width 0.11 - 0.12, length 0.41 - 0.42.

Material

Holotype male, ex *Crax alector* Linnaeus, Cerro de la Neblina, T. F. Amazonia, Venezuela, 26.I.1985, P. J. Spangler, P. N. Spangler, R. A. Faltoute, and W. E. Steiner; in collection of U. S. National Museum of Natural History. Paratypes, 2 females, 10 males, same data as holotype; distributed among the U. S. National Museum of Natural History, Oklahoma State University, and University of Minnesota.

Remarks

Species of *Oxylipeurus* have now been recorded from 5 of the 12 species of Curassows. Male lice are larger than females for *O. craxae craxae* Carriker and *O. craxae annulatus* Carriker, both found on *Crax alberti* Fraser, and for *O. globicerus* Carriker found on *Crax rubra* Linnaeus; these 3 thereby differ from *O. spangleri* in this feature as well as in the gross shape of the male genitalia and in the shape and chaetotaxy of the terminalia of both sexes. The female of *O. rhynchoti* (Carriker) found on *Crax mitu* (Linnaeus) is larger than the male; however, the female has its thoracic sternal plate a distinctly different shape from that of *O. spangleri* (Fig. 4 vs. Fig. 5) and the lateroposterior projections of the terminal abdominal segment much longer; the males of the 2 species differ in the shape and chaetotaxy of the ventral terminalia. Carriker (1944) erroneously illustrates *O. rhynchoti* with 4 median medium setae on the dorsal abdomen, while there are only 2 on our specimens.

Oxylipeurus concolor (Rudow) was described from specimens collected off a museum skin of *Crax globulosa* Spix. This louse species has not been found since the original description was published. We believe that the host was not a Curassow, because this louse has 3 large prominent setae on each temple, while all verified collections from Curassows have only one large prominent seta on each temple.

This species is named for Dr. Paul J. Spangler, U. S. National Museum of Natural History, one of the collectors.

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